Applicant: Adjakple et al. Application No.: 10/675,639

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Canceled)
- 2. (Canceled)
- (Canceled)
- (Currently amended) <u>A method of reselecting a reference channel, the method comprising:</u>

transmitting a composite channel on which a plurality of channels are multiplexed, wherein an error rate measurement is performed on received signals on a reference channel selected from the plurality of multiplexed channels for use in selectively controlling transmission of the composite channel;

selecting a channel from the plurality of multiplexed channels as the reference channel initially used for error rate measurement:

monitoring the reference channel based on a quantitative data content criteria to determine an ON state when the quantitative data content criteria is met and an OFF state when the quantitative data content criteria is not met; and

selecting a different channel from the plurality of multiplexed channels as the reference channel when monitoring of the reference channel reflects an OFF state, wherein:

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the channels are transport channels (TrCHs) and the reference channel is a reference transport channel (RTrCH),

each TrCH has a transport time interval (TTI) of a given size of which a largest TTI size is an integer multiple,

the TrCHs are multiplexed on a coded composite transport channel (CCTrCH),

a block error rate measurement is performed on the RTrCH, and monitoring of the RTrCH is performed at a time interval corresponding to the TTI size of the RTrCH;

the TrCHs each have a block error rate (BLER) requirement and a TrCH having a least restrictive BLER requirement is selected as the RTrCH initially used for error rate measurement;

The method of claim 3 wherein there are N number of TrCHs multiplexed onto the CCTrCH:

the TrCHs are assigned a preference level for selection, first through N^{th} , the first preference level being highest;

the preference level is based first on the BLER requirement and then on TTI size, such that the first TrCH has a least restrictive BLER requirement and a smallest TTI size among TrCHs having the same BLER requirement;

the N^{th} TrCH has a most restrictive BLER requirement and a largest TTI size among TrCHs having the same BLER requirement, and

the first TrCH is selected as the RTrCH initially used for error rate measurement.

5. (Original) The method of claim 4 wherein when the first TrCH is selected as the RTrCH and monitoring of the first TrCH channel reflects an OFF

state, the second TrCH is then selected as the RTrCH.

- 6. (Original) The method of claim 4 wherein when an ith TrCH is selected as the RTrCH, where i is less than N, and monitoring of the ith TrCH channel reflects an OFF state, a different TrCH is then selected as the RTrCH from among the group of channels consisting of the first TrCH through the (i+1)th TrCH.
- 7. (Original) The method of claim 6 wherein when the ith TrCH is selected as the RTrCH, the first through the ith TrCHs are each monitored based on a quantitative data content criteria to determine an ON state when the quantitative data content criteria is met and an OFF state when the quantitative data content criteria is not met and when monitoring of the ith TrCH channel, such that if any TrCH with a preference level higher than the RTrCH is determined to be in an ON state, a TrCH that is determined to be in an ON state with highest preference level is then selected as the reselected RTrCH.
- (Original) The method of claim 7 wherein monitoring of a TrCH is performed no less than once during each time interval corresponding to the TTI size of the TrCH
- (Original) The method of claim 7 wherein the determining when a
 TrCH is in an OFF state includes determining that data was not received on the
 TrCH for a predetermined number of consecutive TTIs of the TrCH.
- 10. (Original) The method of claim 7 wherein the determining when TrCH is in an ON state includes determining that data was received on the TrCH in at

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least one of a predetermined number of TTIs of the TrCH.

11. (Original) The method of claim 2 wherein a TrCH having the largest TTI size defines TTI boundaries based on that largest size for all TrCHs and the selecting a different TrCH from the plurality of multiplexed TrCH as the RTrCH becomes effective at one of such defined TTI boundaries.

- 12. (Canceled)
- 13. (Canceled)
- 14. (Canceled)
- (Canceled)
- 16. (Canceled)
- 17. (Canceled)
- 18. (Currently amended) <u>A wireless transmit receive unit (WTRU)</u> comprising:
- a transmitter configured to transmit a composite channel on which a plurality of channels are multiplexed;
- an error rate measurement circuit to perform measurements on received signals on a reference channel selected from the plurality of multiplexed channels for use in selectively controlling transmission of the composite channel; and

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composite channel received signal processing circuitry comprising:

monitor circuitry configured to monitor the selected reference channel based on a quantitative data content criteria to determine an ON state when the quantitative data content criteria is met and an OFF state when the quantitative data content criteria is not met: and

reference channel circuitry configured to be responsive to the monitoring circuitry such that when monitoring of the reference channel reflects an OFF state, the reference channel selection circuitry selects a different channel from the plurality of multiplexed channels as the reference channel for the error measurement circuitry and the monitoring circuitry, wherein:

the channels are transport channels (TrCHs);

the reference channel is a reference transport channel (RTrCH), each TrCH has a transport time interval (TTI) of a given size of which a largest TTI size is an integer multiple.

the TrCHs are multiplexed on a coded composite transport channel (CCTrCH),

the error rate measurement circuitry is configured to perform a block error rate measurement on the RTrCH;

the monitoring circuitry is configured to monitor the RTrCH no less than during each time interval corresponding to the TTI size of the RTrCH;

the TrCHs each have a block error rate (BLER) requirement;

the reference channel circuitry is configured with a TrCH having
a least restrictive BLER requirement as the default TrCH selection
initially used as the RTrCH:

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The receiver of claim 17 wherein there are N number of TrCHs multiplexed onto the CCTrCHI[.]]:

and said the reference channel selection circuitry is configured to assign a preference level for selection to the TrCHs, first through Nth, the first preference level being highest, based first on their BLER requirement and then on TTI size such that the first TrCH has a least restrictive BLER requirement and a smallest TTI size among TrCHs having the same BLER requirements[[,]];

and-the Nth TrCH has a most restrictive BLER requirement and a largest TTI size among TrCHs having the same BLER requirement[[,]]; and

the first TrCH is selected as the RTrCH initially used for error rate measurement.

- 19. (Currently amended) The <u>WTRU</u> receiver of claim 18 wherein said reference channel selection circuitry is configured such that when the first TrCH is selected as the RTrCH and monitoring of the first TrCH channel reflects an OFF state, the second TrCH is then selected as the reselected RTrCH.
- 20. (Currently amended) The <u>WTRU</u> receiver of claim 18 wherein said reference channel selection circuitry is configured such that when an ith TrCH is selected as the RTrCH, where i is less than N, and monitoring of the ith TrCH channel reflects an OFF state, a different TrCH is then selected as the reselected RTrCH from among the group of channels consisting of the first TrCH through the (i+1)th TrCH.
 - 21. (Currently amended) The WTRU receiver of claim 20 wherein said

monitoring circuitry is configured such that when an ith TrCH is selected as the RTrCH, where i is less than N, the first through the ith TrCHs are each monitored based on quantitative data content criteria to determine an ON state when the quantitative data content criteria is met and an OFF state when the quantitative data content criteria is not met, and said reference channel selection circuitry is configured such that if any TrCH with a preference level higher than the RTrCH is determined to be in an ON state, a TrCH that is determined to be in an ON state with highest preference level is then selected as the reselected RTrCH.

- 22. (Currently amended) The <u>WTRU</u> receiver of claim 21 wherein said monitoring circuitry is configured such that monitoring of a TrCH is performed no less than once during each time interval corresponding to the TTI size of the TrCH.
- 23. (Currently amended) The <u>WTRU</u> receiver of claim 21 wherein said monitoring circuitry is configured such that the determining when a TrCH is in an OFF state includes determining that data was not received on the TrCH for a predetermined number of consecutive TTIs of the TrCH.
- 24. (Currently amended) The <u>WTRU</u> receiver of claim 21 wherein said monitoring circuitry is configured such that the determining when TrCH is in an ON state includes determining that data was received on the TrCH in at least one of a predetermined number of consecutive TTIs of the TrCH.
- 25. (Currently amended) The <u>WTRU receiver</u> of claim 16 wherein a TrCH having the largest TTI size defines TTI boundaries based on that largest size for all TrCHs and said reference channel selection circuitry is configured such that the

selecting a different TrCH from the plurality of multiplexed TrCH as the RTrCH becomes effective at one of such defined TTI boundaries.

- 26. (Canceled)
- 27. (Canceled)
- 28. (Canceled)
- 29. (Canceled)
- 30. (Canceled)
- 31. (Canceled)
- 32. (Canceled)
- 33. (Canceled)